

CAIR / CAMR Implementation Workgroup

Meeting #3
July 7, 2005

Overview

- Old Business
 - Interim applicability approach
 - Data overview & remaining needs
 - Letter – applicability determination request
- New Business
 - Opt-in provisions
 - Overview - allowance allocation methods

Interim Applicability

- Overview
 - Establish preliminary universe of sources
 - Proceed with further discussion of rule implementation features
 - Revise applicability, if necessary, upon guidance from EPA

Interim Applicability

- Approach
 - Straight reading of rule language
 - Comparison with Acid Rain Program
 - Identifying “reasonable” possibilities
 - Consistent implementation
 - Data availability
 - Source identification

CAIR EGU Definition

- Electric generating unit or EGU means:
 - (1) Except as provided in paragraph (2) of this definition, a stationary, fossil-fuel-fired boiler or stationary, fossil fuel fired combustion turbine serving at any time, since the start-up of a unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale.
 - (2) For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit serving at any time a generator with nameplate capacity of more than 25 MWe and supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale. If a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to paragraph (1) of this definition starting on the day on which the unit first no longer qualifies as a cogeneration unit.

Interim Applicability

- CAIR
 - Fossil Fuel Fired
 - Combusting any amount of fossil fuel in any calendar year:
 - Natural gas, petroleum, coal, or any form of solid liquid, or gaseous fuel derived from such material
- CAMR
 - Coal Fired
 - Combusting any amount of coal or coal derived fuel, alone or in combination with any amount of any other fuel, during any year
 - Anthracite, bituminous, subbituminous, or lignite

Interim Applicability

- Key Criteria
 - Unit serves at least one generator with a nameplate capacity greater than 25 MWe
 - Producing electricity for sale
 - Generator capacities are not summed
 - Co-generators = Acid Rain Program Co-generators

Interim Applicability

- Comparison with Acid Rain Program
 - IPP exemption not in CAIR
 - Coal Cogen efficiency std – in CAIR, not ARP
 - Simple cycle turbine exemption – not in CAIR
 - All new units (>25 MW) are affected

Interim Applicability

- Date cutoffs
 - “serving at any time, since the start-up of a unit’s combustion chamber”
 - Using Acid Rain Program definitions / determinations
 - Databases are consistent, QA’d and readily available
 - Approach includes history of retired units
 - Remaining questions for unaffected / exempt units

Interim Applicability

- CAMR
 - Must be coal fired, otherwise, identical to CAIR applicability
 - Sources subject to CAIR are not subject to the “Boiler MACT”

Interim Applicability

- Determination Request Letter
 - Approved and signed by the Director
 - Sent to Region 7 Administrator
- Discussion / Questions

Iowa Sources

- Handout
 - Draft 1 Iowa Sources.xls
 - Please note – this is very draft

Available Data

- Identified sources
 - Annual Electric Generator Report
 - EIA-860
 - Nameplate capacity, prime mover, energy source
 - Generator level data
 - EIA-906/920 Monthly Time Series File
 - EIA-906 and EIA-860
 - Net capacity, monthly fuel use
 - Aggregated to facility level

Available Data

- Identified Sources
 - Acid Rain Program
 - Readily available, QA'd, consistent
 - Used in “initial allocations”
 - Does not include non-ARP sources
 - DNR Emission Inventory Data
 - Primary purpose is emission estimates
 - “Ozone season” data

Available Data

- What data should be used?
 - Allocations
 - New source baselines
 - Opt-in baselines
 - Need for program specific reporting requirements?

Next Steps

- How to:
 - Make generator to emission unit connections
 - Obtain initial baseline data (particularly for non-Acid Rain units)
 - Build a timely, efficient and accurate data collection process for the future

Lunch Break

Opt-In Provisions

- State chooses whether to allow or not
 - Boilers, turbines, other fossil fuel fired combustion devices that vent all emissions through a stack and meet monitoring, recordkeeping, and recording requirements of part 75.
 - Can opt in for NO_x, SO₂ or both

Opt-In Provisions

- Baseline established from Part 75 monitoring
 - Only years with 90% data availability
- For allocations:
 - Lesser of most stringent state or federal SO₂ rate, or 70% of baseline SO₂ rate.
- Alternative Opt-In Approach
 - Deeper cuts in 2015 and later years
- Can not opt-out for a period of 5 years

Opt-In Provisions

- Discussion
 - Pro's
 - Con's
 - Recommendation

Allocations Overview

- Purpose
 - Distribute allowance allocations
 - Affected units must hold one allowance for each unit of emissions at the end of the annual reconciliation period.
 - Units may trade, sell, buy, bank, etc., based on their current and forecasted needs

Allocations Overview

- Flexibility
 - NOX ozone season allocations
 - NOX annual allocations
 - Hg allocations
 - Specific allocation details

Allocation Overview

- Allocation details
 - Timing
 - Annually or in multi-year blocks
 - Initial allocation is a multi-year block
 - Format
 - Calculated distribution formula
 - New unit set asides
 - Auctions

Allocation Overview

- Multiple options
 - Fuel weighted heat input formula (EPA Model)
 - “Modified Output” (Preamble pg. 25280)
 - Existing units baseline data frozen
 - New units folded into allocations
 - Retired units receive allowances indefinitely
 - Output based
 - Others?

Allocation Overview

- The EPA acknowledges that since allowances have value, different allocations of allowances clearly do impact the distribution of wealth among different generators.

Allocations Overview

- Open Discussion
 - Key issues
 - Allocation timing
 - Allocation methods
 - New units
 - Data sources
 - Unintended consequences

Recap / Action Items